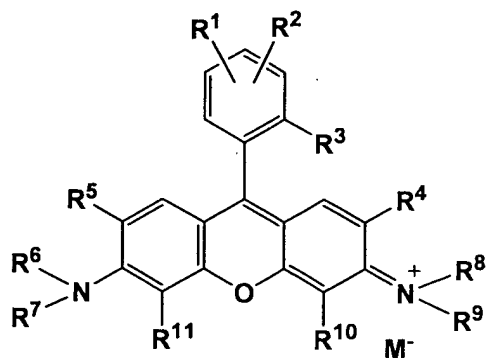


Abstract

A fluorescent probe which is represented by the following formula (wherein R¹ and R² represent hydrogen atom, or a substituent for trapping proton, a metal ion, or an active oxygen species; R³ represents a monovalent substituent other than hydrogen atom, carboxy group, or sulfo group; R⁴ and R⁵ represent hydrogen atom, a halogen atom, or an alkyl group; R⁶ to R⁹ represent an alkyl group; R¹⁰ and R¹¹ represent hydrogen atom, a halogen atom, or an alkyl group; M⁻ represents a counter ion; and the combination of R¹, R², and R³ (1) imparts a substantially high electron density to the benzene ring to which they bond so that the compound can be substantially non-fluorescent before trapping proton, a metal ion, or an active oxygen species, and (2) substantially reduces electron density of the benzene ring to which they bond so that the compound after trapping proton, a metal ion, or an active oxygen species can be highly fluorescent after the trapping.

[Formula 1]



(I)